Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

Review of Part 15 and other Parts of the Commissioner's Rules	) ET Docket No. 01-278) RM-9375) RM-10051

To: The Commission

COMMENTS OF MICHAEL M. BRADLEY
IN RESPONSE TO NOTICE OF PROPOSED RULE MAKING

I strongly oppose the portion of the FCC proceeding, ET Docket No. 01-278, that would change the Part 15 rules governing unlicensed, periodic, intentional radiators so as to permit increased duty cycles and field strengths for radio frequency identification (RFID) systems. The action under consideration is contrary to the very purpose of the existing Part 15 rules. Its implementation would result in serious interference to established, FCC-authorized amateur radio operations, including those involving critical communications support for emergency operations.

If approved, the RFID devices would inevitably interfere with the legitimate operations of licensed amateur stations. The issue is exacerbated by the fact that the mobile devices would have unpredictable locations. The RFID systems would be emitting 110,000 uV/m, and using duty cycles up to two minutes at a time, with only a ten-second silent period between transmissions. These high power, long-duty-cycle transmissions would occur at 433.6 MHz, immediately adjacent to the 432 MHz weak-signal band, and in a band that is used extensively by FCC-licensed amateur radio operators for control links for repeaters and other functions.

The current FCC rules [Section 15.231(e)] for periodic radiators permit field strengths of the proposed magnitude (measured at 3 meters) and frequency only for devices with duty cycles of less than one second, and which must have a silent period between transmissions of at least 30 times the duration of the transmission (and in any case at least ten seconds). There is an excellent reason for the existing FCC duty cycle limitation, and that is to minimize the potential for detrimental radio interference. If the unlicensed RFID devices were to operate on a non-periodic basis, (i.e. with unlimited duty cycles) the maximum field strength permitted at the proposed frequency, based on the Commission's Rules now in place, would be on the order of 200 uV/m, rather than 110,000 uV/m. It is important to note that there is absolutely no analysis in the petition by SAVI Technology (RM-10051) that addresses the interference potential of the RFID devices with the operation of amateur stations.

The most important issue is the frequency allocation. Even assuming that these high-power systems will be allowed to operate with high duty cycles, there is no justifiable reason why 433.9 MHz should be chosen for this application. In fact, the RFID systems should not be allowed to operate on any frequency between 420 and 450 MHz. I request that the proposed change to the Part 15 rules be denied.

Respectfully,

Michael M. Bradley, Ph.D.
K6MMB (Amateur Extra Class)
Danville, California 94626
k6mmb@arrl.gov